

REMARKS

The undersigned appreciates the Examiner for conducting a telephonic interview on June 17, 2004.

The Section 112, First Paragraph Rejections

During the above telephonic interview, the Examiner and the undersigned reached an agreement on the claim amendment to independent claims 1 and 19 to overcome the pending the section 112, First Paragraph rejections. Additional amendments have been made to delete the second occurrence of "multiple criteria." With the additional claim amendments, the Applicants respectfully submit to the Examiner that the pending rejections under 35 U.S.C. §112, First Paragraph should be withdrawn.

The Section 102(e) Rejections

In the currently pending Office Action, the Examiner has rejected claims 1 through 12 and 15 through 30 and 33 through 36 as allegedly being anticipated by the Katsuyama reference under 35 U.S.C. §102(e).

During the above telephonic interview, the Examiner kindly elaborated on the rejection basis with respect to the Katsuyama reference.

Newly amended independent claims 1 and 19 each explicitly recite "the natural language likelihood being determined based upon a comparison to a predetermined title dictionary." As explicitly recited above, the newly amended independent claims require the comparison of the words to a specific dictionary that contains possible predetermined titles. This amendment has been supported by the original disclosures of the current application at lines 25 through 28 on page 6 as follows:

The natural language analysis unit 126 compares the recognized characters against a predetermined dictionary and determines whether or not the recognized characters match or resemble any of the predetermined titles or words in a dictionary. For example, the dictionary contains a set of predetermined suffixes which indicate a noun form and its corresponding statistical information.

The Katsuyama reference discloses a title extracting apparatus based upon the likelihood as measured by points. The points correspond to attributes such as “an underline attribute, a frame attribute, and a ruled line attribute of each character string rectangle, the positions of the character string rectangles in the document image, and the mutual position relation....” The title extracting apparatus thus extracts a character string rectangle with the highest points as a title rectangle. The Katsuyama reference fails to anticipate “a predetermined title dictionary” as explicitly recited in newly amended independent claims 1 and 19.

Dependent claims 2 through 12 and 15 through 18, 20 through 30 and 33 through 36 ultimately depend from independent claim 1 or 19 and incorporate the above noted patentable feature of the independent claims. Based upon the above patentable distinction, the Applicant respectfully submits to the Examiner that the rejections of claims 1 through 12 and 15 through 30 and 33 through 36 under 35 U.S.C. §102(e) should be withdrawn.

The Section 103 Rejections

The Examiner has rejected claims 13, 14, 31 and 32 under 35 U.S.C. §103 as allegedly being obvious over the Katsuyama reference in view of the Chen et al. reference. For the lack of the disclosure on the determination of the characters end in a noun form and in a set of predetermined suffixes, the Examiner has cited the Chen et al. reference at lines 10 through 55 in column 15. Then, the Examiner has concluded that it would have been obvious to combine the Chen et al. reference with the Katsuyama reference.

Dependent claims 13, 14, 31 and 32 ultimately depend from independent claim 1 or 19 and incorporate the above discussed newly amended patentable features of the current invention as explicitly recited in independent claims 1 and 19. As discussed above with respect to the section 102 rejections, the Katsuyama reference generally discloses a title extraction device or software program without teaching, disclosing or suggesting “a predetermined title dictionary.”

The Chen et al. reference discloses a technique for recognizing certain keywords based upon optical character recognition. However, the Chen et al. reference is not related to the title extraction or the title search in the text. After character strings are recognized, a keyword is autocorrelated based upon the vector information of the character string. The Chen et al. further discloses a Hidden Markov Model (HMM) for statistically identifying the character string based upon a sequence of states with probabilistic transitions between states and features associated with each state. Each state is described by a probability distribution of the feature vectors that characterize the portion of the character. Although the Chen et al. reference discloses a recognition technique for identifying certain keywords, the cited reference fails to disclose, teach or suggest the title extraction.

Thus, the Applicants respectfully submit that it would not have been obvious to one of ordinary skill in the art to provide the patentable features of newly amended independent claims 1 and 19 base upon the cited references alone or in combination.

It also appears that the Examiner has simply combined the Chen et al. reference with the Katsuyama reference without particularly pointing out any particular reason or motivation that is disclosed or suggested by either of the cited references. In this regard, the CAFC requires that the reference at least suggests motivation or a reason to combine the reference with another reference for the purpose of rejecting a claim under the section 103. *For example*, In re Rouffet, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998). The section 2143.01 of the MPEP also details the criteria for combining references as follows: “Obviousness can only be established by combining or modifying the teaching of the prior art to produce the claimed

invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the reference themselves or in the knowledge generally available to one of ordinary skill in the art.”

Because the use of the natural language processing in combination with other physical characteristics of text strings in identifying a title in text is not taught, disclosed or suggested, the Applicant respectfully submits to the Examiner that it is not proper to combine the Chen et al. reference with the Katsuyama reference for the purpose of rejecting the pending claims.

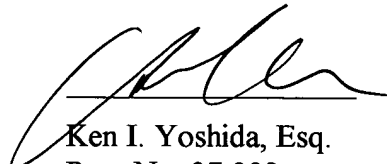
Therefore, based upon the above two reasons, the Applicant also respectfully submits to the Examiner that the rejection of claims 13, 14, 31 and 32 under 35 U.S.C. §103 should be withdrawn.

Lastly, the Applicant respectfully submits that because the disclosures of Chen cannot be properly combined with those of Katsuyama, the above section 103 rejection basis should not be applied against independent claims 1 and 19 in the future Office Action.

Conclusion

In view of the above amendments and the foregoing remarks, Applicant respectfully submits that all of the pending claims are in condition for allowance and respectfully request a favorable Office Action so indicating.

Respectfully submitted,


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